Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (original): An electrode material comprising a surface/chemically modified positive electrode (cathode) material, wherein the surface/chemical modification is a ceramic.

Claim 2 (previously presented): The composition of claim 1, wherein the surface/chemical modification is $Li_xNi_{1-y}M_yO_2$, where $0 \leq x \leq 1$, $0 \leq y \leq 1$, and M = Mg, Al, Ti, V, Cr, Fe, Co, Cu, Zn, and Ga.

Claim 3 (previously presented): The composition of claim 1, wherein the positive electrode (cathode) material is $LiMn_2O_4$.

Claim 4 (canceled)

Claim 5 (withdrawn): The composition of claim 1, wherein the positive electrode (cathode) material is $LiCoO_2$.

Claim 6 (original): The composition of claim 1, wherein the surface/chemical modification material is $Li_xNi_{1-y}Co_yO_2$, where $0 \leq x \leq 1$; $0 \leq y \leq 1$.

Claim 7 (withdrawn): The composition of claim 1, wherein the surface/chemical modification material is Al_2O_3.

Claim 8 (withdrawn): The composition of claim 1, wherein the surface/chemical modification material is MgO.

Claim 9 (withdrawn): The composition of claim 1, wherein the surface/chemical modification material is $MgAl_2O_4$.

Claim 10 (withdrawn): The composition of claim 1, wherein the surface/chemical modification material is $Li_{1.05}Mn_{1.9}Ni_{0.05}O_4$.

Claim 11 (withdrawn): The composition of claim 1, wherein the surface/chemical modification material is Cr_2O_3.

Claim 12 (previously presented): An electrode material comprising a $LiMn_2O_4$ spinel oxide having been surface/chemically modified with a surface/chemical modification material $Li_xNi_{1-y}Co_yO_2$, where $0 \leq x \leq 1$; $0 \leq y \leq 1$.

Claim 13 (currently amended): The composition of claim 1~~1~~2, wherein the surface/chemical modification material is $Li_xNi_{1-y}Co_yO_2$, where $0 \leq x \leq 1$; $0 \leq y \leq 1$.

Claim 14 (withdrawn): The composition of claim 11, wherein the surface/chemical modification material is Al_2O_3.

Claim 15 (withdrawn): The composition of claim 11, wherein the surface/chemical modification material is MgO.

Claim 16 (withdrawn): The composition of claim 11, wherein the surface/chemical modification material is $MgAl_2O_4$.

Claim 17 (withdrawn): The composition of claim 11, wherein the surface/chemical modification material is Cr_2O_3.

Claim 18 (withdrawn): An electrode material comprising a $LiCoO_2$ layered oxide having been surface/chemically modified with a surface/chemical modification material $Li_{1+x}Mn_{2-x-y}M_yO_4$ where $0 \leq x \leq 0.33$, $0 \leq y \leq 2$ and M = Ni or Co.

Claim 19 (withdrawn): The composition of claim 17, wherein the surface modification material is Al_2O_3.

Claim 20 (withdrawn): The composition of claim 17, wherein the surface modification material is $Li_{1.05}Mn_{1.9}Ni_{0.05}O_4$

Claim 21 (withdrawn): An electrode material preparation method comprising:

supplying a $LiMn_2O_4$ spinel oxide electrode material;

mixing the $LiMn_2O_4$ spinel oxide electrode material with a surface/chemical modification material selected from a group consisting of $Li_xNi_{1-y}Co_yO_2$, where $0 \leq x \leq 1$; $0 \leq y \leq 1$; Al_2O_3; Cr_2O_3; MgO; $MgAl_2O_4$; and combinations thereof ; and

heat-treating the mixture to prepare a surface/chemically modified $LiMn_2O_4$ electrode material.

Claim 22 (withdrawn): The method of claim 20, wherein the heat-treating is performed at a temperature in the approximate range of 100°C to 1000°C.

Claim 23 (withdrawn): The method of claim 20 wherein the heat-treating is performed for approximately 1 to 24 hours.

Claim 24 (withdrawn): The method of claim 20, wherein the surface/chemical modification material is in the approximate range of 1 to 20 weight percent of the surface/chemically modified $LiMn_2O_4$ electrode material.

Claim 25 (currently amended): An electrode material comprising a surface/chemically modified $LiMn_2O_4$ spinel oxide said electrode material prepared by a process comprising:

a) refluxion of a precursor solution in glacial acetic acid, wherein the precursor is $LiCo_{0.5}Ni_{0.5}O_2$;

b) preparing a precursor solution in water, wherein the precursor is selected from a group consisting of Al_2O_3; Cr_2O_3; MgO, and $MgAl_2O_4$;

c) dispersing $LiMn_2O_4$ spinel oxide in the precursor solution; and

d) heating the dispersed $LiMn_2O_4$ spinel oxide to approximately 100 to 500 degrees C; and

e) firing the heated dispersed $LiMn_2O_4$ spinel oxide at 500 to 900 degrees C.

Claim 26 (withdrawn): A method of preparing an electrode material for lithium-ion batteries comprising:

supplying a $LiCoO_2$ layered oxide electrode material;

mixing the $LiCoO_2$ layered oxide electrode material with a surface/chemical modification material selected from a group consisting of Al_2O_3; Cr_2O_3; MgO, $MgAl_2O_4$; $Li_{1+x}Mn_{2-x-y}M_yO_4$ where $0 \leq x \leq 0.33$, $0 \leq y \leq 2$ and M = Ni or Co; and combinations thereof; and

heat-treating the mixture to prepare a surface/chemically modified $LiCoO_2$ electrode material.

Claim 27 (withdrawn): The method of claim 23, wherein the heat-treating is performed at a temperature in the approximate range of 100°C to 1000°C.

Claim 28 (withdrawn): The method of claim 23 wherein the heat-treating is performed for approximately 1 to 24 hours.

Claim 29 (withdrawn): The method of claim 25, wherein the surface/chemical modification material is in the approximate range of 1 to 20 weight percent of the surface/chemically modified $LiCoO_2$ electrode material.

Claim 30 (currently amended): An electrode material comprising a surface/chemically modified $LiCoO_2$ layered oxide said electrode material prepared by a process comprising:

a) refluxion of a precursor solution in glacial acetic acid, wherein the precursor is $Li_{1+x}Mn_{2-x-y}M_yO_4$ where $0 \leq x \leq 0.33$, $0 \leq y \leq 2$ and M = Ni or Co;

b) preparing a precursor solution in water, wherein the precursor is selected from a group consisting of Al_2O_3; Cr_2O_3; MgO, and $MgAl_2O_4$;

c) dispersing $LiCoO_2$ layered oxide in the precursor solution; and

d) heating the dispersed $LiCoO_2$ layered oxide to approximately 100 to 500 degrees C; and

e) firing the heated dispersed $LiCoO_2$ layered oxide at 500-900 degrees C.